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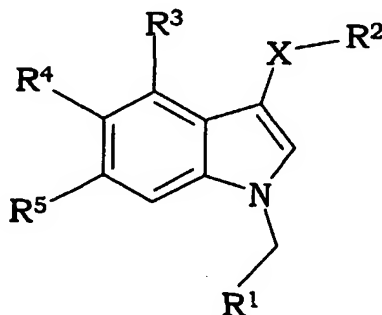
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(54) Title: INDOLES USEFUL IN THE TREATMENT OF ANDROGEN-RECEPTOR RELATED DISEASES



(1)

(57) **Abstract:** This invention provides non-steroidal compounds with affinity for the androgen receptor and utility for androgen-receptor related treatments, having a structure according to the formula (1) wherein X is S, SO or SO<sub>2</sub>; R<sup>1</sup> is a 5- or 6-membered monocyclic, hetero- or homocyclic, saturated or unsaturated ring structure optionally substituted with one or more substituents selected from the group consisting of halogen, CN, (1C-4C)fluoroalkyl, nitro, (1C-4C)alkyl, (1C-4C)alkoxy or (1C-4C)fluoroalkoxy; R<sup>2</sup> is 2-nitrophenyl, 2-cyanophenyl, 2-hydroxymethyl-phenyl, pyridin-2-yl, pyridin-2-yl-N-oxide, 2-benzamide, 2-benzoic acid methyl ester or 2-methoxyphenyl; R<sup>3</sup> is H, halogen or (1C-4C)alkyl; R<sup>4</sup> is H, OH, (1C-4C)alkoxy, or halogen; R<sup>5</sup> is H, OH, (1C-4C)alkoxy, NH<sub>2</sub>, CN, halogen, (1C-4C)fluoroalkyl, NO<sub>2</sub>, hydroxy(1C-4C)alkyl, CO<sub>2</sub>H,

CO<sub>2</sub>(1C-6C)alkyl, or R<sup>5</sup> is NHR<sup>6</sup>, wherein R<sup>6</sup> is (1C-6C)acyl optionally substituted with one or more halogens, S(O)<sub>2</sub>(1C-4C)alkyl, or S(O)<sub>2</sub>aryl optionally substituted with (1C-4C)alkyl or one or more halogens, or R<sup>5</sup> is C(O)N(R<sup>8</sup>,R<sup>9</sup>), wherein R<sup>8</sup> and R<sup>9</sup> each independently are H, (3C-6C)cycloalkyl, or CH<sub>2</sub>R<sup>10</sup>, wherein R<sup>10</sup> is H, (1C-5C)alkyl, (1C-5C)alkenyl, hydroxy(1C-3C)alkyl, (1C-4C)alkylester of carboxy(1C-4C)alkyl, (1C-3C)alkoxy(1C-3C)alkyl, (mono- or di(1C-4C)alkyl)aminocarbonyl, or a 3-, 4-, 5- or 6-membered monocyclic, homo- or heterocyclic, aromatic or non-aromatic ring, or R<sup>8</sup> and R<sup>9</sup> form together with the N a heterocyclic 5- or 6-membered saturated or unsaturated ring optionally substituted with (1C-4C)alkyl; or a salt or hydrate form thereof.

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